

Fig. 1A

SECTION 4.3.3.3

PSTN, ISDN, INTERNET, etc.

Second Generation Cellular System (2G)

Core Network
Service Node(s)

Base Station
Controller(s) (BSCs)

BS

BS



Third Generation Cellular System

Core Network
Service Node(s)

UMTS Terrestrial Radio Access
Network (UTRAN)

Radio Network
Controller (RNC)

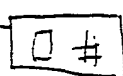
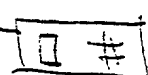
RNC

Base
Station (BS)

BS

BS

BS



Other Cellular System

Core Network
Service Node(s)

BS

BS

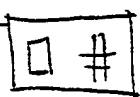


FIGURE 1B

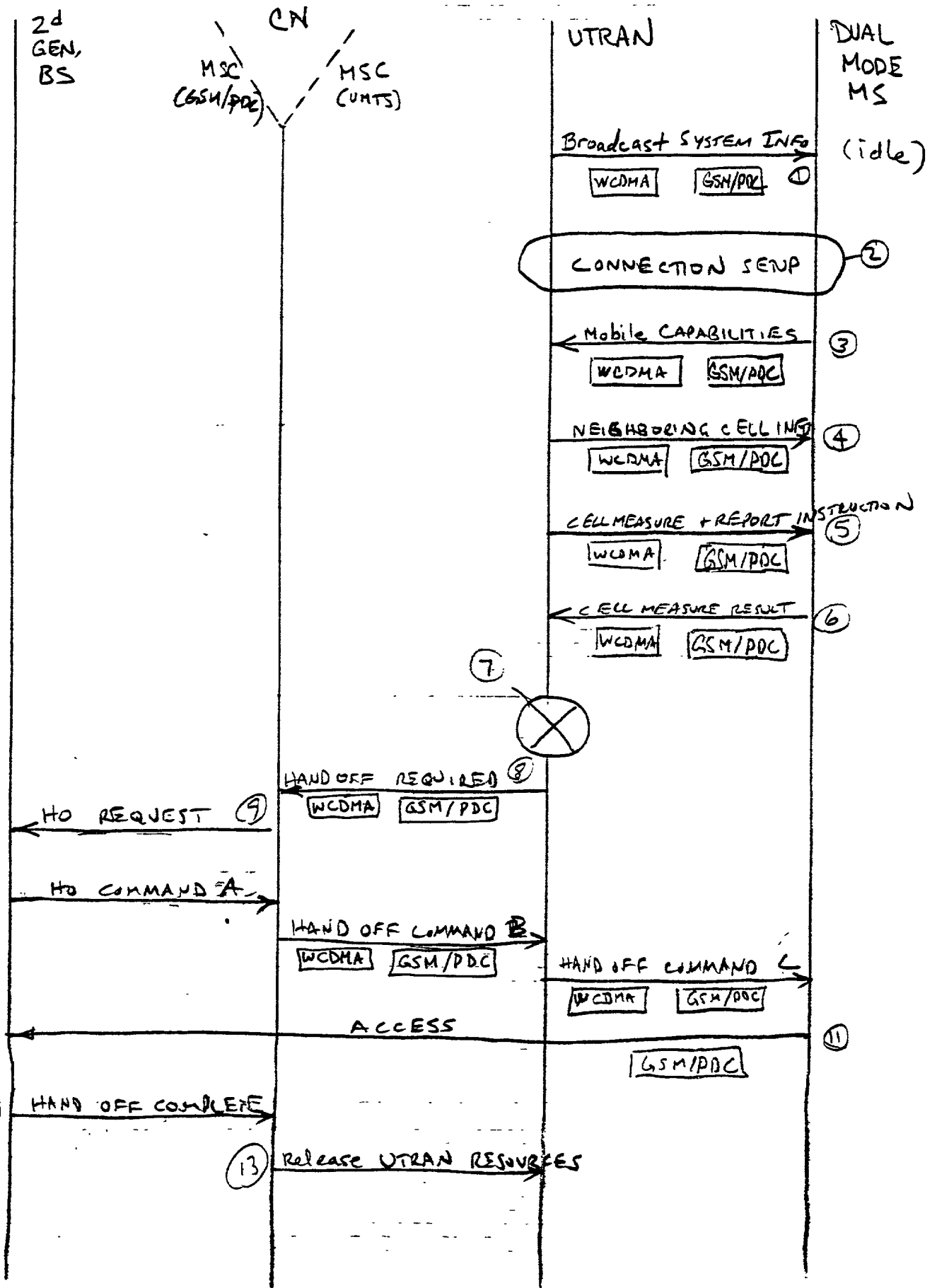


FIGURE 2

⋮
Neighbouring Cell n
Cell Type (UMTS, Foreign Type 1, Foreign Type 2, ...)
Neighbouring Cell Data (as specified by the specifications for the particular system)
Neighbouring Cell n-1
Cell Type (UMTS, Foreign Type 1, Foreign Type 2, ...)
Neighbouring Cell Data (as specified by the specifications for the particular system)
Neighbouring Cell n-3
Cell Type (UMTS, Foreign Type 1, Foreign Type 2, ...)
Neighbouring Cell Data (as specified by the specifications for the particular system)
⋮

Figure 1/2 Alternative 1a – General Alternative, UMTS cells are treated as any cell.

⋮
Neighbouring UMTS cells according to the UMTS specification)
⋮
Neighbouring Cell n
Cell Type (Foreign Type 1, Foreign Type 2, ...)
Neighbouring Cell Data (as specified by the foreign system)
Neighbouring Cell n-1
Cell Type (Foreign Type 1, Foreign Type 2, ...)
Neighbouring Cell Data (as specified by the foreign system)
Neighbouring Cell n-3
Cell Type (Foreign Type 1, Foreign Type 2, ...)
Neighbouring Cell Data (as specified by the foreign system)
⋮

Figure 2 Alternative 1b – Optimised Alternative, UMTS cells are treated differently.

	:
MS Radio Capabilities	
System Type (UMTS, Foreign Type 1, Foreign Type 2, ...)	
MS Radio Capabilities Data (as specified by the specifications for the particular system)	
MS Radio Capabilities	
System Type (Foreign Type 1, Foreign Type 2, ...)	
MS Radio Capabilities Data (as specified by the specifications for the particular system)	
	:

Figure 5 Alternative 2a - General Alternative, UMTS radio capabilities are treated as any radio capability.

system

⋮
MS Radio Capabilities (according to the UMTS specification)
⋮
MS Radio Capabilities
Cell Type (Foreign Type 1, Foreign Type 2, ...)
MS Radio Capabilities Data (as specified by the specifications for the particular foreign system)
⋮

Figure 4
b Alternative 2b - Optimised Alternative, UMTS radio capabilities are treated differently.

	:
Neighbouring Cell n	
Cell Type (UMTS, Foreign Type 1, Foreign Type 2, ...)	
Neighbouring Cell Data (as specified by the specifications for the particular system)	
Neighbouring Cell n-1	
Cell Type (UMTS, Foreign Type 1, Foreign Type 2, ...)	
Neighbouring Cell Data (as specified by the specifications for the particular system)	
Neighbouring Cell n-3	
Cell Type (UMTS, Foreign Type 1, Foreign Type 2, ...)	
Neighbouring Cell Data (as specified by the specifications for the particular system)	
	:

Figure 5 Alternative 3a – General Alternative, UMTS cells are treated as any cell.

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⋮
Neighbouring UMTS cells (according to the UMTS specification)
⋮
Neighbouring Cell n
Cell Type (Foreign Type 1, Foreign Type 2, ...)
Neighbouring Cell Data (as specified by the foreign system)
Neighbouring Cell n-1
Cell Type (Foreign Type 1, Foreign Type 2, ...)
Neighbouring Cell Data (as specified by the foreign system)
Neighbouring Cell n-3
Cell Type (Foreign Type 1, Foreign Type 2, ...)
Neighbouring Cell Data (as specified by the foreign system)
⋮

Figure 6 Alternative 3b - Optimised Alternative, UMTS cells are treated differently.

659010" T 493250

	:
Neighbouring Cell n	
Cell Type (UMTS, Foreign Type 1, Foreign Type 2, ...)	
Measurement Control Data (as specified by the specifications for the particular system)	
Neighbouring Cell n-1	
Cell Type (UMTS, Foreign Type 1, Foreign Type 2, ...)	
Measurement Control Data (as specified by the specifications for the particular system)	
Neighbouring Cell n-3	
Cell Type (UMTS, Foreign Type 1, Foreign Type 2, ...)	
Measurement Control Data (as specified by the specifications for the particular system)	
	:

Figure 7
9 Alternative 4a – General Alternative, UMTS cells are treated as any cell.

⋮
Measurement Control Data for Neighbouring UMTS cells (according to the UMTS specification)
⋮
Neighbouring Cell n
Cell Type (Foreign Type 1, Foreign Type 2, ...)
Measurement Control Data (as specified by the foreign system)
Neighbouring Cell n-1
Cell Type (Foreign Type 1, Foreign Type 2, ...)
Measurement Control Data (as specified by the foreign system)
Neighbouring Cell n-3
Cell Type (Foreign Type 1, Foreign Type 2, ...)
Measurement Control Data (as specified by the foreign system)
⋮

Figure 8 Alternative 4b - Optimised Alternative, UMTS cells are treated differently.

⋮
Neighbouring Cell n
Measurement Report Data (as specified by the specifications for the particular system)
Neighbouring Cell n-1
Measurement Report Data (as specified by the specifications for the particular system)
Neighbouring Cell n-3
Measurement Report Data (as specified by the specifications for the particular system)
⋮

Figure 9 // Alternative 5a – General Alternative, UMTS cells are treated as any cell.

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⋮
Measurement Report for Neighbouring UMTS cells (according to the UMTS specification)
⋮
Neighbouring Cell n
Measurement Report Data (as specified by the foreign system)
Neighbouring Cell n-1
Measurement Report Data (as specified by the foreign system)
Neighbouring Cell n-3
Measurement Report Data (as specified by the foreign system)
⋮

Figure 10¹ Alternative 5b – Optimised Alternative, UMTS cells are treated differently.
(2)

Message discriminator = "Handover Command"
System Type (UMTS, Foreign Type 1, Foreign Type 2, ...)
"Handover Command" (as specified by the specifications for the particular system)

Figure 14 Alternative 6a - General Alternative, UMTS cells are treated as any cell.

669040 "T498250

Message discriminator = "Handover Command"
Handover Command parameters specific to UMTS [optional ¹]
Foreign Handover Command [optional parameter set ²]
System Type (Foreign Type 1, Foreign Type 2, ...)
"Handover Command" as specified by the foreign system)

Figure 12 Alternative 5b – Optimised Alternative, UMTS cells are treated differently

Message discriminator = "Handover Required"
⋮
Target Cell n
Cell Type (UMTS, Foreign Type 1, Foreign Type 2, ...)
Cell Identifier (as specified by the foreign system)
Target Cell n+1
Cell Type (UMTS, Foreign Type 1, Foreign Type 2, ...)
Cell Identifier (as specified by the foreign system)
Target Cell n+2
Cell Type (UMTS, Foreign Type 1, Foreign Type 2, ...)
Cell Identifier (as specified by the foreign system)
⋮

Figure 13 Alternative 7a - General Alternative, UMTS cells are treated as any cell.

Message discriminator = "Handover Required"
⋮
UMTS Target Cell n
Cell Identifier (according to the UMTS specification)
UMTS Target Cell n-1
Cell Identifier (according to the UMTS specification)
UMTS Target Cell n-2
Cell Identifier (according to the UMTS specification)
⋮
Foreign Target Cell n
Cell Type (Foreign Type 1, Foreign Type 2, ...)
Cell Identifier (as specified by the foreign system)
Foreign Target Cell n-1
Cell Type (Foreign Type 1, Foreign Type 2, ...)
Cell Identifier (as specified by the foreign system)
Foreign Target Cell n-2
Cell Type (Foreign Type 1, Foreign Type 2, ...)
Cell Identifier (as specified by the foreign system)
⋮

Figure 14 Alternative 7b - Optimised Alternative, UMTS cells are treated differently.